(Press Release)

Beacon Power Demonstrates Smart Energy Matrix System; California and Federal Energy Officials Cite Project Accomplishments and Highlight Potential for Commercial Service

WILMINGTON, Mass., Dec 12, 2005 (BUSINESS WIRE) -- Beacon Power Corporation (NASDAQ: BCON), a company that designs and develops advanced products and services to support more stable and reliable electricity grid operation, was featured in a press briefing organized in collaboration with the California Independent System Operator (ISO) on December 6th at a PG&E facility in San Ramon, California. Beacon demonstrated the performance of its scale-power Smart Energy Matrix for journalists from statewide television, radio and print outlets, as well as industry and wire service reporters. Presentations were given by executives from the California Energy Commission, U.S. Department of Energy, the California ISO, and Beacon Power, followed by a close-up demonstration of the flywheel system's capabilities.

"This was a great opportunity to share the story of Beacon's flywheel technology, and the promise it holds for making California's power grid more reliable," said Bill Capp, Beacon Power president and CEO. "We are pleased to see the enthusiasm of visitors to the facility, who can walk inside this scale-power Smart Energy Matrix and see for themselves that this integrated group of flywheels can switch easily and repeatedly from full power charge to full power discharge in a few seconds. They come away with a good understanding of the technology and its performance."

Ken Wiseman, Chairman of the Board of Governors of the California ISO, was one of the speakers. He pointed out that 200,000 new homes are built in California each year. "These homeowners want dependable power, and they expect us to provide it," said Wiseman. "The ISO is very interested in new and better ways to manage the grid, especially with the expected addition of significant new wind generation in the next few years."

One benefit to having the full-power Smart Energy Matrix, which Beacon is looking to build in 2007, available for frequency regulation is that it may free up other conventional generation assets from being used for this purpose. This would enable the state's grid operator (the ISO) to reallocate valuable power plants to deliver power that will help avoid shortages. In addition, California's commitment to wider statewide deployment of renewable energy sources, such as wind and solar, will necessitate even more regulation services because of their inherently variable output.

Dr. Imre Gyuk, head of energy storage programs at the U.S. Department of Energy, praised the collaboration that produced this first-of-its-kind system. "The successful development and delivery of this high-performance flywheel energy storage system is the realization of a vision the Department of Energy shares with the California Energy Commission and the ISO," he stated. "We wanted to prove that flywheel technology has the capability to provide the essential service of frequency regulation. I am most pleased with the results, and I look forward to being able to test the larger, higher-power flywheel that Beacon has begun working on. I also expect that the Department of Energy will be able to continue to support the development of the larger flywheel and its deployment in a commercial-sized Smart Energy Matrix."

The demonstration used a pre-recorded remote signal feed to drive the Beacon system and graphically display a wide range of performance characteristics in a short period of time. The California ISO has been working to establish a secure data feed to transmit signals from its Energy Management System in Folsom, California (where the grid is operated), to the Smart Energy Matrix. Response to live ISO signal transmission, as well as formal acceptance by the Energy Commission, are expected to take place in late January, assuming completion of the communications link and final system-level testing.

Beacon Power is also building a scale-power Smart Energy Matrix demonstration system for the New York State Energy Research and Development Authority (NYSERDA). A recent contract change calls for Beacon to incorporate additional functionality in the system to supply uninterruptible power to the location in Amsterdam, New York. In addition, at the request of the customer the demonstration unit will be modified to be able to provide volt-amperes reactive power, or VARs, which help stabilize the power supply to electrical equipment. In order to allow for these changes, the demonstration system is now planned for installation in February 2006. There was no change in the contract value.